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CHAPTER TWO
MAPPING AND RESEARCH

2-1 ORGANIZATION AND MANAGEMENT

2-1.01 Overview of Mapping and Research Functions

The main functions of Right of Way Mapping and Research personnel are gathering and managing real property information and highway system information and preparing the right of way plans and acquisition documents necessary to acquire property for MDOT projects. The flow of Mapping and Research work in the project development process is illustrated in Table 2-1.

Mapping and Research personnel gather data on ownership and improvements for each parcel of land the project is likely to affect. Mapping personnel are responsible for determining MDOT's existing property rights in and to the land underlying an existing or proposed transportation facility location. Mappers translate the information into preliminary right of way plans that show the existing limit of the right of way or other MDOT ownership. Mappers later prepare final right of way plans that document the new area limits of the project, basic design features including entrances and slopes, and the areas and types of acquisitions needed for the project. The final right of way plans serve as the basis for the parcel descriptions Mapping includes in property acquisition documents. The Condemnation Unit in the Program Support Services Unit handles the coordination of condemnations with the Office of Legal Services and processes the notification and payment documents for affected property owners.

The Program Support Services R/W Research Unit responds to internal and external requests for information on highway layouts, MDOT ownership rights and other data relating to the real property aspects of the transportation system. Research activities include gathering and maintaining documentation relating to MDOT's transportation systems and compiling and retaining relevant municipal and county records as needed. A major part of the Research function is to make the information in these public records available to, and understandable to, interested parties outside of MDOT.

2-1.02 Organization and Team Structure

Mapping and Research functions occur at 2 different, but interrelated, levels of the Bureau of Project Development (Bureau). The decentralized segment of Mapping and Research is housed within the Bureau's modal programs. Mappers are assigned to the Urban & Federal Bridge, Urban & Arterial Highway and Regional Programs. Within the programs, each Project Development Team includes a Mapper who is responsible for the Mapping and Research functions on the Team's projects. The Bureau Director or Assistant Director appoints Team Members on an as-needed basis for multimodal projects and non-program activities.

The centralized part of Right of Way Mapping and Research is located within the Program Support Services Unit. The Program Support Services R/W Mapping Support Unit provides mapping support and review services to Mappers in the Project Teams and resolves complex mapping problems. The Condemnation Unit within the Program Support Services Unit handles the preparation of condemnation documents and owner condemnation packages. The Program Support Services R/W Research Unit handles public information research functions and maintains an array of mapping records and documents.

Mapping and Research personnel are drawn from the following classifications:

1. Transportation Aide. This position field locates evidence of property ownership to prepare Property Owner Reports (PORs), gathers and compiles data for right of way documentation, plots and graphs data using computer software programs to assist in map preparation, sorts and files documentation and assists higher level Technicians with project work.

2. Assistant Technician. Typical job duties for an Assistant Technician include drafting right of way maps using computer-aided drafting software; assisting higher level Technicians with the drafting of maps; researching and interpreting legal documents, town records, tax maps, survey plans and ownership documents to interpret right of way limits for straightforward requests; preparing basic documents that serve as legal references, including PORs; and supervising less skilled personnel as needed.

3. Technician. The Technician researches and interprets legal documents, town records and property ownership information to determine property ownership and prepare proposed ownership limits and rights for moderately complex projects; handles PORs functions, including preparing documents and providing training on POR processes; drafts moderately complex documents that serve as legal references; develops moderately complex procedures using computer-aided drafting software; creates software macros for others to use; and supervises other personnel as needed.

4. Senior Technician. This position usually researches and interprets legal documents, town records and property ownership information to determine ownership and draft ownership and right of way limits for complex projects; evaluates and resolves lost boundary roadway layouts and complex wrought portion locations; interprets laws and regulations relating to right of way and property rights; trains, coaches and evaluates skilled and semi-skilled technical personnel; provides information to the public on complex right of way matters; assists in policy development and process improvements; and supervises other personnel.

2-1.03 Project Development Team Activities

The major Mapping and Research activities performed for Project Teams, and the personnel responsible for them, are shown in Table 2-1.

TABLE 2-1 — Mapping and Research Activities in the Team Process of Project Development

Mapping and Research Activity	Responsible Party
Ascertain existing right of way from MDOT records and assemble background map for other Team members.	Project Team Mapper
Prepare Names and Addresses List; add data to Names and Addresses Database	Project Team Mapper or other program personnel
Initiate POR process, including the completion of POR forms by the property owner and locating property ownership evidence in field (e.g., pins, monuments, fences)	Project Team Mapper or other program personnel
Initiate preliminary title investigations, if appropriate.	Project Team Mapper
Prepare Right of Way Base Map: existing right of way and tax map property lines for Public Hearing use only.	Project Team Mapper
Add Property Owner Report information to Program Mapping Support Unit's Property Owner Report database.	Project Team Mapper or other program personnel
Prepare Title Reports.	Office of Legal Services
Brief Project Manager about existing right of way, especially in the case of prescriptive easement highways.	Project Team
Prepare preliminary right of way plans: existing right of way, property lines from title abstract and POR's, property owner information.	Project Team Mapper with review by Program Support Services R/W Mapping Support Unit
Review preliminary alignment prepared by Design Team Member; provide comments on changes needed to avoid undesirable right of way impacts and on project schedule.	Project Team Mapper
Request additional title work by Office of Legal Services for permanent acquisitions, or as necessary.	Project Team Mapper
Merge elements of design with relevant property ownership information, topographic data, existing right of way and proposed new right of way; prepare parcel setups (parcel-specific acquisition data) for all necessary acquisitions; request any needed survey topography updates; submit comments to Project Manager on suggested methods to reduce right of way impacts.	Project Team Mapper
Order ownership verifications.	Project Team Mapper
Verify property ownerships and review title work (includes title updates if required due to passage of 6 months or more).	Office of Legal Services
Update Names and Addresses database.	Project Team Mapper or other program personnel

TABLE 2-1 — Mapping and Research Activities in the Team Process of Project Development
(Continued)

Mapping and Research Activity	Responsible Party
Review for compliance with Design Plans Impacts Complete standards; merge final design with existing layout; map necessary land and rights to be acquired for project to create final right of way plans; submit completed design and right of way plans to Program Right of Way Support Manager; advise Project Manager of any property owner concerns or requests generated during contacts and field inspections.	Project Team Mapper with review by Program Support Services R/W Mapping Support Unit
Revise plans to reflect any changes requested by Project Team in the nature or scope of rights to be acquired due to design changes or acquisition difficulties.	Project Team Mapper
Prepare Notification List and deliver it to Program Support Services Condemnation Unit.	Office of Legal Services
Update Names and Addresses database.	Project Team Mapper or other program personnel
Prepare Notice of Layout and Taking to condemn properties for project.	Program Support Services Condemnation Unit.
Update title reports.	Office of Legal Services
Record Notice of Layout and Taking.	Office of Legal Services
Send property owner condemnation packages, consisting of right of way map, copy of Notice of Layout and Taking, and payment check for rights acquired.	Program Support Services Condemnation Unit
Send copy of Notice of Layout and Taking to Project Team Mapper.	Program Support Services Condemnation Unit
Refer any unsettled acquisitions to the State Claims Commission 60 days after the date of the recording of the Notice of Layout and Taking.	Program Support Services Condemnation Unit
Update right of way plans to reflect any changes generated by construction phase activities or parcel settlement activities and to display right of way control information and monumentation.	Project Team Mapper or Program Support Services R/W Mapping Support Unit
Provide requested plans and other information for State Claims Commission hearings on unsettled parcels.	Project Team Mapper and Program Support Services R/W Mapping Support Unit
Update title reports on parcels with pending compensation settlement agreements.	Office of Legal Services
Analyze the process and evaluate right of way performance to find ways to improve it.	All Mapping and Research and Office of Legal Services Personnel involved with the project

2-1.04 Decision-Making Milestones and Standards

The most important decision-making points for Mapping and Research personnel during the development of projects are:

1. Determine the amount of title work performed for each parcel on a project. Mapping personnel typically decide this using the title standards developed by the Office of Legal Services. However, the treatment of a particular parcel may vary from the standards depending on the needs and circumstances of the project.

2. Identify the areas where there are insufficient road records, or when conditions on the ground vary from record descriptions. Mapping and Research personnel apply the procedures described in Section 2-6.06(a). Where those procedures do not produce a clear determination, an educated determination must be made based on the existing evidence.

3. Resolve title problems and conflicting property owner claims. This activity occurs to the extent required in order to move a project forward. Mapping and Research, in cooperation with the Office of Legal Services, resolves these issues by interpreting records, ground conditions and the law.

4. Settle conflicts between right of way requirements generated by proposed design elements and the needs of property owners or municipalities. Mappers often act as the “middleman” in these situations. Personnel typically resolve these issues through identification of alternative design elements or mitigation measures that address property owner/municipal concerns.

5. Determine the type, size and location of acquisitions. Mappers base their decisions about acquisition requirements on the design for the transportation facility, right of way acquisition criteria, site conditions and other relevant project characteristics.

6. Complete final right of way plans. A determination that right of way plans are final and meet quality standards results in distribution of the plans to Right of Way Operations Team Members and others who use the plans to complete their project work.

2-1.05 Quality Assurance

Quality assurance is the set of activities that are performed by Operational personnel in each function to continuously improve the level of performance in meeting MDOT mission and Division goals. Quality assurance is a shared responsibility of all MDOT personnel who are involved in Mapping and Research. This is distinguished from quality control, which is the corresponding management activity that focuses on general right of way program oversight, conformity of operations to policy and quality of coordination between right of way functions and with other Departmental units.

Elements of quality in the Mapping and Research function include:

1. Conforming with all State and Federal rules and regulations and MDOT criteria relating to right of way acquisitions and mapping;

2. Effectively coordinating with the Project Team Members responsible for other project development activities;

3. Consistently working with Project Team Members to identify and resolve in a timely manner all issues affecting the completion of right of way plans;

4. Accurately gathering information on properties and ownership and providing that information to all who need it;

5. Properly maintaining and interpreting right of way records relevant to projects and to public information inquiries;

6. Making reasonable and timely decisions about the type, size and location of the property interests acquired for projects;

7. Assisting mapping consultants retained by the Department as required to ensure timely and quality products for projects;

8. Participating in process and performance evaluations, including 360-degree evaluations; and

9. Proactively contributing to the continuous improvement of Mapping and Research policies, practices and procedures so that Mapping and Research functions reflect industry “best practices” and quality standards.

Mapping and Research personnel will perform specific quality assurance tasks as determined in consultation with the Supervisor of Right of Way Mapping and Research. Following are examples of quality assurance activities that may be performed:

1. Develop a peer review process of evaluating mapping work products with the aim of constructively identifying opportunities for improvement.

2. Perform formal evaluations of the quality and timeliness of consultant work products.

3. Perform 360-degree evaluations of specific mapping processes. This would include participation of all parties involved in the process.

4. Survey Departmental and external “customers” as to the effectiveness of specific Mapping and Research policies and practices.

MDOT will progressively refine quality practices, set goals, develop performance standards and evaluate progress in meeting goals. Quality assurance is the operational-level participation in this process, as distinct from management-level quality control activities.
Chapter 10 provides detailed guidance on the MDOT Right of Way Quality Assurance/Quality Control Program. Section 2-6.06(f) describes the specific quality standards for right of way plans.

2-1.06 Coordination with Other Functions

Mapping and Research activities interface with a number of other MDOT functions. The relationship is both as a provider of information and services and as a recipient of information and services. The main points of coordination between Mapping and Research personnel and other Right of Way personnel, or other parts of MDOT, are:

1. Planning. The Bureau of Planning, as well as planning personnel in the Office of Freight Transportation and Office of Passenger Transportation, frequently require ownership and description information for existing MDOT properties.

2. Survey. Preliminary right of way mapping relies heavily on the topographic and related information provided to Mapping and Research personnel by Survey. Mapping and Research Project Team Members must receive survey plans before they can begin preparing right of way plans. Mapping and Research personnel assist Survey in its work by passing along information gained through the POR process and field inspections. This mandates a close relationship between Survey and personnel performing POR functions.

3. Design. The design aspects of a transportation project largely dictate the scope of the property acquisitions designated by Mapping personnel. Project Team Mappers need to coordinate closely with Designers and help Designers understand the right of way implications of design work. This close relationship helps to avoid delays in the completion of right of way plans due to late design changes or to unexpected difficulties reconciling the right of way requirements of the design with the conditions in the field.

4. Office of Legal Services. This office provides Mappers with property title information for various steps of the acquisition process and helps Mapping and Research resolve legal questions concerning property ownership. R/W Mapping Support and Condemnation Units act as a resource for the Office of Legal Services in administrative hearings before the State Claims Commission and at judicial trials by delivering relevant information from highway records and MDOT property ownership records. R/W Mapping Support also prepares plans and exhibits for these proceedings. Coordination occurs both through Project Teams and through the Program Support Services Unit.

5. Environmental Office. Final right of way plans serve as the basis for calculating potential environmental impacts from transportation projects. However, coordination between Mappers and environmental personnel on Project Teams occurs throughout the project development process. This assists the Environmental Office in anticipating the scope of impacts that require State or Federal review and approval. Mapping and Research personnel also assist the Environmental Office with the identification, mapping and acquisition of parcels for mitigation of environmental impacts. This activity takes place both through the Project Team process and as independent projects for mitigation banking. The Environmental Office is made aware of the existence of private water supplies in or near a potential project area through the POR process.

6. Right of Way Valuation. Valuation of property interests for acquisition and disposition requires accurate identification of the type, size and location of the interests. Mappers work with Appraisers and others involved in valuation activities to prepare the necessary plans, occurs in the Project Teams.

7. Right of Way Negotiation. Negotiators use right of way plans in their discussions with property owners. Mapping and Research personnel work with Negotiators to resolve questions that arise during negotiations about property ownership, the status of improvements on the land and potential property impacts of the transportation project. Coordination with Negotiators takes place ~~both~~ in the Project Teams.

8. Right of Way Relocation Services. Relocation planning and the execution of relocation activities require information about property interests to be acquired and the impacts of projects on activities on the adjacent lands. Mapping and Research personnel work with the Right of Way personnel handling relocation activities to provide plans, ownership information, acquisition options and other information useful to relocation decisions. This coordination occurs through the Project Teams.

9. Utilities and Railroads Services. Mapping and Research staff help Utilities and Railroad Services personnel in the Bureau to identify the rights of existing utility and railroad facilities within a potential project area. Preliminary right of way plans are a tool used by Utilities and Railroad Services to negotiate with railroads and utilities about changes that need to be made to accommodate the proposed transportation project. Mapping and Research also provides plans and property ownership information to Utilities and Railroad Services when a new utility or railroad facility is proposed that uses or affects MDOT property. Coordination in these areas occurs in Project Teams.

2-1.07 Use of Consultants

On occasion, MDOT uses consultants to perform Mapping and Research functions. Chapter 9 contains information about contracting considerations and processes, including consultant qualification, selection and evaluation. Sections 9-3.03(a) and 9-3.03(b) address the Mapping

and Research activities typically included in these contacts. The Program Right of Way Support Manager makes the decision whether to use consultant services on a case-by-case basis. Factors considered include the length of the job, the number of property owners, the nature of the project's location (e.g., urban, rural) and the cost of consultant services as compared to in-house services. Program staff monitor and review consultant performance of Mapping and Research functions in the same manner as described in Section 2-6.06(f).

2-2 RIGHT OF WAY AND LAND RECORDS

2-2.01 Project Records and Data

At the beginning of a project, Mapping and Research personnel gather a variety of data. The information includes:

1. Property ownership information, as described in 2-3.01;

2. The finding and locating of property ownership evidence in the field, as described in 2-3.02; and

3. Property related information, using the por form discussed in section 2-3.03.

Information from the PORs is entered into the Mapping and Research project file (electronic and hard copy). Completed PORs become a part of the permanent project file. A Names and Addresses (N&A) List is created from property ownership information entered into the N&A database.

Other project records including acquisition parcel descriptions; preliminary and final right of way plans and related mapping data; deeds, Notices of Layout and Taking (condemnation) and other title documents; work permits granted by property owners; condemnation process notices, proof of payments and related documentation; State Claims Commissions referral records; and records pertaining to the administrative or legal settlement of compensation claims for property acquisitions are located in the R/W Research Unit.

2-2.02 Transportation Systems Records and Data

The Program Support Services R/W Research Unit houses property plans and records relating to transportation facilities throughout the State. MDOT uses the records for project development and maintenance and operations purposes. Other entities, including municipalities, metropolitan planning organizations and private developers, request information from the records for their own projects.

The Program Support Services R/W Research Unit maintains records and related indices for the following:

1. Right of Way Plans. Recorded final plans from MDOT projects showing limits of construction, limits of MDOT right of way and project acquisitions.

2. Deed Files. Includes recorded title documents relating to current and former MDOT properties, including highways, railroads, ports, maintenance lots, rest areas and mitigation sites. Files include Notices of Layout and Taking, fee and easement deeds, and other ownership records.

3. State Highway Plans. Includes large-scale plans for all State highways and layout descriptions where available.

4. State-aid Highway Plans. Includes large-scale plans and layouts where available.

5. County Commissioners' Road Records. Descriptions of recorded and unrecorded road layouts ordered by county commissioners. Plans are included where available.

6. Town Road Records. Descriptions of recorded and unrecorded road layouts ordered by local municipalities. Plans are included where available.

7. Land Office Records. Historic records of actions by an early State agency that handled the sale of State-owned lands.

8. Section 815 Records. Description of properties subject to 1 ***MRSA*** Section 815 and their control dates. The Program Support Services R/W Research Unit manages these records according to the procedures described in Section 2-7.04.

Collectively, these records provide historical and current data on the location and legal status of property interests held or used for transportation purposes. The Program Support Services Unit also maintains records of controlled access acquisition, modification and disposal, as well as agreements and letters of no objection issued to property owners for particular structures and activities on or near MDOT property. Many of these records are and will be maintained in the Division Offices.

As MDOT completes projects, the Program Support Services R/W Mapping Support Unit updates Plan File, Deed File, State Highway Plans and State-aid Highway Plans records and indices. Updates for other records occur as information becomes available through project work or other means.

2-2.03 Availability of Records to the Public

The Maine Public Records Law, 1 ***MRSA*** Sections 401 and 402, provides that information in the custody of a State agency that is received or prepared in connection with the transaction of Government business is accessible to the public unless this information specifically is made confidential by law. The Statute applies to information in written, printed, graphic and electronic forms. Under this law, most MDOT records are open to public inspection. This includes the records maintained by the Program Support Services Right of Way Unit.

Requests for access to Right of Way records protected by 23 ***MRSA*** Section 63 should be referred to the Right of Way Support Manager in the program receiving the request. Depending on the scope and nature of the request, the Manager decides whether to provide the requested information. The Manager also may refer the request to the Office of Legal Services for action. In general, Right of Way plans, Notices of Layout and Taking, and State or State-aid highway system records are not confidential. Completed POR forms, however, are considered

confidential by MDOT. Requests for other types of records must be judged against the statutory standards and any applicable public interest in maintaining confidentiality.

2-3 DOCUMENTATION OF PROPERTY AND PARCEL INFORMATION

2-3.01 Survey, Tax and Title Information

The Project Team Mapper (in the Urban & Federal Bridge and Regional Programs) or assigned personnel (for Urban & Arterial Highway and other programs) obtain full-size tax maps of the project study area. Copies of all maps and survey plans within the project area are also collected. Sources for these documents include property owners, municipal offices, previous MDOT project files, the registry of deeds and private surveyors. Mapping and Research personnel obtain additional title information by requesting the Office of Legal Services to perform a title search for specified parcels in the project area.

For each parcel of land that may be affected by the project, the assigned mapper or program staff person prepares a summary containing the names and addresses of each owner, the map and lot of the parcel and the parcel deed references. This information is used to create the initial Name and Addresses (N&A) List in a database format as a .dbf file, with data fields for owner name, mailing address, tax map and lot number, and deed book and page reference. The N&A List database is located in a shared folder on the MDOT computer system's public (P:) drive and is accessible in read-only format to authorized personnel.

Department personnel use the N&A List to contact property owners throughout the project development and property acquisition processes. The N&A List is updated as other project information is gathered, including PORs, title information obtained by the Office of Legal Services and field information from the Survey crews in the Regional Program.

2-3.02 Field Investigations

A critical step in the POR process is finding and locating property pins, monuments, fences and other forms of evidence indicating property line locations in the field. This task can occur before, during or after completion of POR's, but should be done as early in the process as practical. The features are flagged with blue surveyor's tape, an identifying mark is painted on the pavement and notes made on a plan/tax map. A plan with the location of the property evidence features noted is provided to Survey crews so that they may accurately locate these features and include them in the topographic survey information used by Right of Way mappers.

2-3.03 Property Owner Contacts and Reports

The Project Team Mapper, for Urban and Federal Bridge, or assigned personnel for Urban and Arterial Highway and Regional programs is responsible for insuring that a POR (Form MR-1) is completed for affected parcels. Whenever practical, this task includes direct contact with the property owner. Contacts by mail may be used if necessary, but they generally prove less effective in gathering the required information. At the time of the contact, the MDOT representative informs the property owner that other MDOT personnel will be in contact to discuss the proposed project and its potential impacts. MDOT provides a copy of the completed POR to property owners upon request.

The completed POR constitutes one of the principal records in Mapping and Research. The form contains:

1. Identifying and contact information for property owners;

2. A history of the property's ownership, improvements and utilities;

3. Current occupancy and use;

4. Past survey work;

5. Any special classifications (historic or public use) affecting the property;

6. Any conditions or uses that might require an environmental assessment of chemical or hazardous materials;

7. Property owners' comments; and

8. Any other information that might be relevant to subsequent right of way or other project development activities.

Completion of the POR includes a visual inspection of the property. MDOT's representative encourages the property owner to participate in that inspection. Information gathered during the inspection includes the location and types of boundary line markers and the locations of wells, septic systems, fences, walls, outbuildings and any other improvements on the property. Notations are included that describe any discrepancies between deed descriptions and field locations of property boundaries. The individual completing the POR also makes a sketch of the property, showing approximate size and location, improvements, apparent boundary lines and indications of how the lines were established. An approximate North arrow is included on the sketch. Completed PORs must include the signature of the person (preferably a landowner of the parcel) completing or providing the information to complete the POR, this form is not to be signed by the MDOT employee or consultant assigned the POR task.

2-4 TITLE INVESTIGATION AND CERTIFICATION

2-4.01 Overview

Title examinations are the means by which MDOT determines who owns property that will be acquired for projects. The Right of Way Mapper and the Office of Legal Services share responsibility for making certain the work is performed on time and in an appropriate manner.

Right of Way Mappers within the Programs request title examinations from the Office of Legal Services and rely on the information produced by title examinations for determining property ownership, property description and property boundaries. The title reports typically include an abstract of every transaction involving the land or premises in question, including sales, mortgages and outstanding liens. The information is used to prepare plans, draft descriptions for documents transferring title, and determine to whom MDOT will make payments for property rights acquired. The process for title examination is the same for MDOT personnel and its consultants. A flowchart illustrating the main steps in the title examination process appears in Figure 2-1.

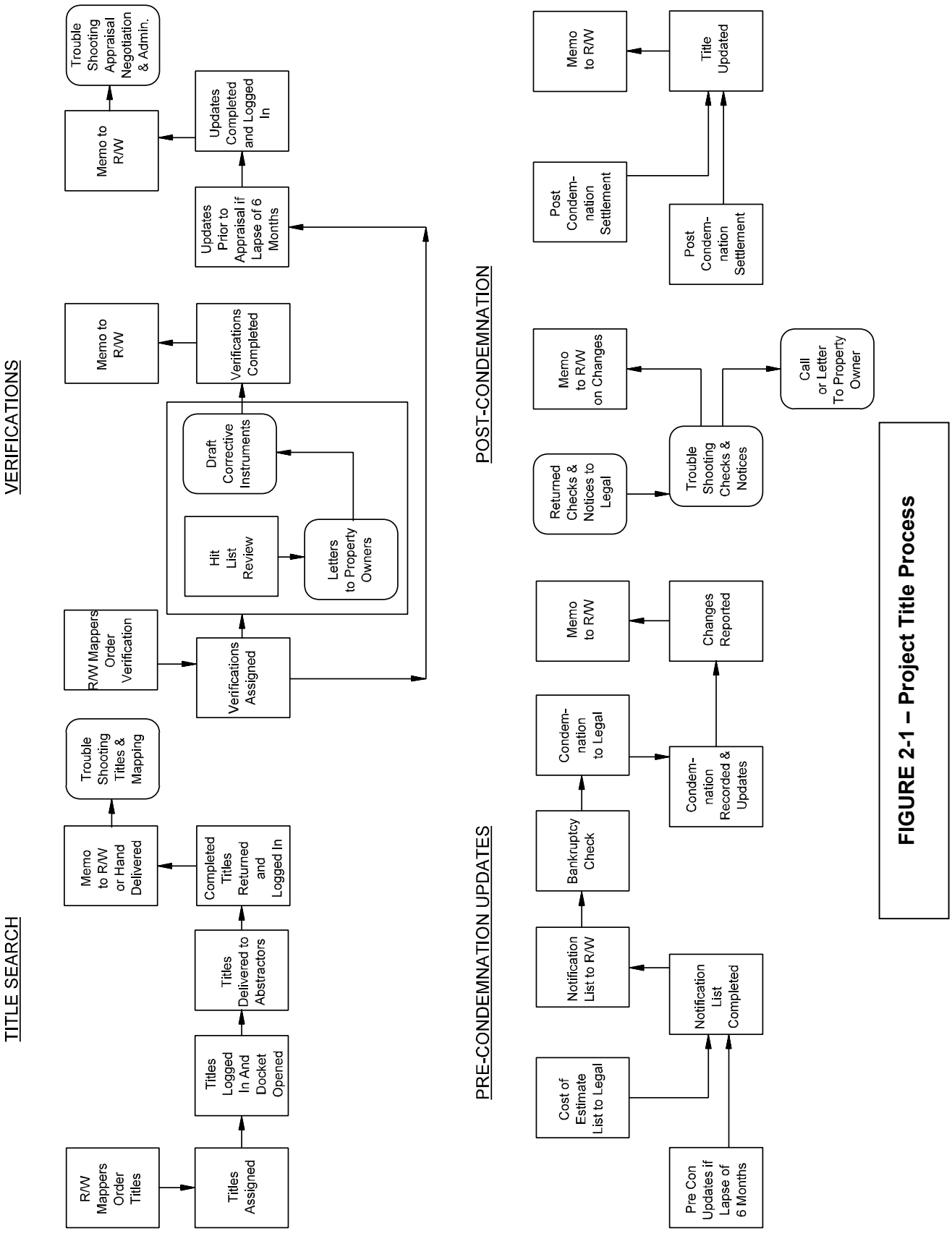

FIGURE 2-1 – Project Title Process

2-4.02 Title Examinations

MDOT follows the standards established by the Maine State Bar Association for title examinations, including the treatment of clouds and defects in title. Exceptions to those standards are made only with the approval of the Principal Real Estate Attorney in the Office of Legal Services. For condemnations, Right of Way Mapping and Research and the Office of Legal Services worked together to establish modified title examination standards. The decision to adopt modified condemnation standards rests on the fact that condemnation automatically vests title in the State of Maine and removes clouds and defects of title. Nevertheless, the title standards for condemnation are reviewed periodically for their effectiveness. In addition, the standards may be altered by agreement on a case-by-case basis.

One area in which title examination practices have been altered is the required period of title searches. The standards appear in Table 2-2.

TABLE 2-2 — Title Search Requirements for Condemnation Parcels

Type of Taking	Limitation on Value of Acquisition	Length of Required Title Search
Fee (all right, title and interest)	None	40 years
Wrought portion (prescriptive easement), major acquisition	None	40 years
Wrought portion (prescriptive easement), acquisition substantially the same as existing area of occupation and use	None	Last acquisition (transfer) to date
Drainage easement	None	Last acquisition (transfer) to date
Permanent easement	None	Last acquisition (transfer) to date
Slope easement	None	Last acquisition (transfer) to date
Temporary construction easement	None	Last acquisition (transfer) to date
Temporary grading rights	No payment made	Current deed only

In cases involving fee acquisitions, Right of Way Mapping and Research and the Office of Legal Services typically agree to use a 40-year title search. Exceptions may be made by mutual agreement in some cases if the risk to the State is deemed acceptable.

The Office of Legal Services conducts title work that correlate to the level of title examination performed at each stage:

1. Current deed retrieval,
2. Search of title activity since the date of the last acquisition,

3. Search of all title and related records for a full 40-year period, and
4. Rundown and certification of title.

The end products include a description of the property affected, the names to be used for condemnation and the names of other parties in interest (including mortgage holders) who must be involved in the transaction because of the need for releases or other documentation.

2-4.02(a) Current Deed Retrieval

Current deed retrievals result in the information used in the preparation of preliminary right of way plans for a project. Using title references supplied by personnel handling the preparation of the project N&A Lists and PORs, the title examiner obtains copies of the current deed description for all properties abutting the proposed project location. Copies of the descriptions are given to the individuals preparing the preliminary right of way plans for use in the initial placement of property lines.

2-4.02(b) Acquisition to Date Examinations

Once the Project Team determines the anticipated right of way acquisition needs for a project, acquisition to date titles are prepared for all properties that may be affected by the acquisition of either temporary or permanent rights. This work provides Mappers with the information necessary to move forward with more detailed plotting of property lines and other property information. This title work identifies critical information including current owner, any transfers out since last acquisition and outstanding mortgages and liens against the property. Acquisition to date title packages include:

1. A copy of the deed to the current owner;
2. A drawing or sketch based on the property description in the current owner's deed;
3. A summary title report that provides:
    a. A schedule of all index entries for the current owner from the deed into that owner, up to the date that the title investigation commenced (the same date is used for all titles on a project);
    b. An abstract of all instruments in the chain of title from the current owner forward, together with copies of any instrument in that chain that includes a change in description or other pertinent new material;
    c. A summary chain of title showing all instruments of record resulting from the schedule of index entries;
    d. An encumbrance sheet showing all encumbrances as indicated on the form; and

e. A cover sheet showing the owner of record;

4. A project inventory listing all of the owners of record by parcel number; and

5. A listing, identified by parcel number, of problems that need to be resolved and a report on any measures to cure or additional information gathered by the Abstractor.

Mappers sometimes need additional title information in order to complete the accurate plotting of property lines. They request that supplemental title work from the Office of Legal Services.

2-4.02(c) 40-Year Title Examinations

Once the final scope of the project is established, the Mapper requests full 40-year title examinations for all proposed project acquisitions that fall within the 40-year search requirements contained in Table 2-2. Abstractors perform these examinations in accordance with the standards of the Maine Bar Association except where the standards are modified by the Program Support Services Unit and the Office of Legal Services. The results of the 40-year examinations are used in final right of way mapping, property valuation and acquisition activities. The Office of Legal Services provides the Program Support Services Condemnation Unit with the Notification List information, including the names and address of each party with a title interest in a parcel, as well as any party with a financial interest. The Program Support Service Condemnation Unit uses the information for document preparation, vouchering of checks and delivery of condemnation packages and other notices to landowners.

The status of project parcel titles is rechecked once Right of Way Operations Team Members complete valuation and negotiation activities, but no more than 6 months prior to the scheduled acquisition date. The Office of Legal Services submits to the Mapper a memo summarizing any ownership or mapping related changes. Mapping and Research uses this information to update the N&A List, request payment checks, draft acquisition documents and prepare notices to owners and parties in interest.

2-4.02(d) Rundown and Certification of Title

To insure that MDOT acquires rights from the proper parties and makes payments to the proper parties, the Abstractor verifies the title immediately prior to recording any voluntary acquisition documents. When recording the Notice of Layout and Taking, the Abstractor records the Notice first, and then updates the titles through the date and time of the recording. The Office of Legal Services delivers to the Program Support Services Condemnation Unit a copy of the recorded Notice or deed that MDOT has acquired good and sufficient title to the properties. Program Managers rely on this document when they execute a Right of Way Certificate (Form AD-3) certifying that MDOT has the necessary rights to construct the project as designed and that all applicable Federal and State requirements governing these acquisitions are satisfied.

2-4.03 Liens

Generally, MDOT relies on condemnation to automatically extinguish any lien holder interest in the property acquired. Whenever the acquisition is accomplished by voluntary deed rather than condemnation, a lien holder's interest in the part acquired is terminated only when the lien holder executes a release of the lien against the property in question. MDOT uses a modified standard for handling the clearance of mortgages and other liens on certain acquisitions:

1. Fee Acquisitions. Where a property owner is awarded the minimum payment amount for the fee ownership of the part acquired, MDOT does not name lien holders on the payment check. For any fee acquisition valued at more than the minimum payment amount, any recorded party with a financial interest is included as a payee on the acquisition check.

2. Permanent Easement Acquisitions. Lien holders are named as check payees on all transactions valued at more than $500.

3. Temporary Easement Acquisitions. Temporary easements, which are valued at no more than the minimum payment amount, do not require the naming of lien holders as payees.

2-4.04 FERC-Licensed Properties

All bridge projects located in the area of a dam or hydro-facility require special title examination measures to determine whether there is Federal Energy Regulatory Commission (FERC) involvement affecting any parcel. Mapping and Research personnel, as well as all other project personnel, notify the Office of Legal Services if any evidence of a dam or hydro-facility is found within the project area.

Because the State of Maine cannot condemn against a parcel over which a FERC license runs, MDOT usually acquires a highway easement from the hydro-facility licensee, who typically also is the property owner. Fee acquisition of these parcels is possible through a complex and time-consuming Federal process. If that type of acquisition is required, the Office of Legal Services works with the hydro-facility licensee to obtain the mandatory pre-approvals from FERC.

2-4.05 Scheduling Title Work

The scheduling milestones for project title work are the ordering of titles, request for verification and pre-acquisition updates. As soon as the Project Team Mapper has sufficient information on a project, the Mapper coordinates with the Office of Legal Services to establish estimated dates for these milestones. The parties also review the tentative scope of project title work in terms of the number of parcels, the length of title search needed for the parcels and any special problems known to the Mapper. This permits the Office of Legal Services to schedule title examiners for the work and helps to insure that the Project Team will receive the completed work when it is needed.

2-4.06 Other Title-Related Functions

2-4.06(a) Recording

The Office of Legal Services handles the recording of condemnations, deeds and other title documents in the appropriate county registry of deeds. After recording, it reports the recording information and any changes in titles to the Program Support Services R/W Mapping Support Unit so that property owner checks and condemnation packages can be mailed out immediately. If the title examiners do find changes in ownership, the Program Support Services Condemnation Unit holds the checks for the affected parcels. The Office of Legal Services prepares and sends to the Program Support Services Condemnation Unit a memorandum that identifies the modifications needed to the checks and plans. The Program Support Services R/W Mapping Support Unit also adds the recording information to the final right of way plans.

2-4.06(b) Resolution of Title Problems and Legal Issues

Title defects often are discovered during parcel title examinations for MDOT projects. The Office of Legal Services takes the lead in working with owners to resolve the defects before MDOT's acquisition. Right of Way Mapping and Research personnel provide support for this activity. Typical issues include:

1. Title or mapping inconsistencies,
2. Boundaries,
3. Riparian rights,
4. Road and right of way locations,
5. Unknown owners,
6. Additional owners,
7. Estates, and
8. Missing interests.

The Office of Legal Services gives notice of the defect to the owner by a letter, which often includes a suggested solution. The Office of Legal Services often also prepares the documents needed to cure the defects, including deeds, easements, discharges and agreements. A copy of the executed and recorded document then becomes a part of the parcel's title report, and the Mapper is notified of any resulting changes to the parcel.

The Office of Legal Services also works with property owners to solve problems when acquisition checks are returned to MDOT because the owners are unable to cash the checks. This can happen for a variety of reasons. Owners are responsible for finding the proper parties to the checks and securing signatures or releases. MDOT personnel must document conversations in these cases and include both those conversations and any other documentation as a part of the title report.

2-5 DOCUMENTATION FOR THE ACQUISITION AND DISPOSITION OF PROPERTY

2-5.01 Types and Legal Description of Interests Acquired

MDOT acquires many different types of property rights. The scope and type of right acquired depends on the project's requirements and the characteristics of the land in question. The types of property rights MDOT most frequently acquires are described below:

1. Fee Title. MDOT acquires all right, title and interest in and to the described property. This type of interest usually is acquired for major components of transportation facilities, like roadbeds. This is the preferred type of acquisition.

2. Permanent Easement. This easement provides the right to enter and perform the activities described in the easement. The acquisition document includes a description of the location of the easement, the purposes for which the easement is acquired and any special terms governing the use or term of the easement. The property owner retains all other rights to the property. Permanent easements are frequently used for drainage and slope areas. Most often they are used where MDOT does not expect that there will be a need to enter the property for maintenance or repair on a frequent basis, so that full fee ownership is unnecessary.

3. Temporary Easement. These are similar to a permanent easement, except that the rights last only for a specified period of time. A typical example is a construction easement for staging work.

4. Wrought Portion or Prescriptive Easement. This easement is acquired by occupation and use of the property that is subject to the prescriptive easement. Typically found where a roadway has been in use for more than 20 years, but there is no record of either a governmental order of layout for the road or a voluntary grant of rights to the public. Section 2-6.06(a) describes the procedures for wrought portion highways.

5. Access Control. Similar to the acquisition of development rights, this right creates a prohibition that prevents all or specified types of access directly to the highway from abutting properties. This includes limited use access agreements that permit only agricultural or residential access to the highways. Acquisition of access control is required in most areas of the Interstate Highway System and in certain areas of intersecting roadways. Acquisition of access control rights elsewhere is done as appropriate to the needs and conditions of the highway as determined under MDOT's Access Management Program (See Sections 7-7.01 and 7-7.02).

6. Work Permits or Rights of Entry. Short-term agreements giving MDOT permission to go onto land to begin preliminary project work. Generally used where valuation and acquisition activities are not yet complete. These rights do not allow for future maintenance activities and are not to be used in place of easements or fee simple acquisitions for features extending outside the existing right of way.

The property rights described above are contained in forms (see Appendix C) that are part of the MDOT electronic database.

2-5.02 Acquisition and Disposal Methods and Practices

MDOT may acquire land by voluntary deed or by involuntary transfer through condemnation proceedings under 23 ***MRSA*** Section 154. In both instances, the Program Support Services Condemnation Unit prepares the acquisition documentation with the assistance of the Office of Legal Services. The Program Support Services R/W Mapping Support Supervisor reviews and approves all acquisition documents.

2-5.02(a) Voluntary Acquisitions

MDOT uses voluntary deeds for non-project acquisitions, including mitigation sites or single parcel transactions, and for project acquisitions that require different timing than the scheduled project condemnation. Individual documents of acquisition may include deeds, easements, leases, work permits and other legal documents. Voluntary deeds may use a quitclaim or warranty format that includes a description of the property and a reference to the relevant right of way plan or individual parcel survey for the property. The Office of Legal Services records the voluntary deed in the registry of deeds for the county in which the land is located. The Program Support Services R/W Mapping Support Unit sends a notice of the transfer, together with a copy of the deed and of the preliminary right of way plans, to the county commissioners, local assessor, and town or city clerk. When the deed is returned from the registry, it is added to the Program Support Services R/W Research Unit's Deed File. The recording reference is added to the right of way plan for the area.

Voluntary deed transactions also may require the preparation and recording of releases for mortgages and other liens affecting the property acquired, as discussed in Section 2-4.03. The Office of Legal Services handles the drafting of the release or the review and approval of form release documents provided by the lien holder. Any required releases are recorded with the voluntary deed from the property owner.

2-5.02(b) Condemnations

The condemnation process, also referred to as eminent domain, involves statutorily mandated procedures contained in 23 ***MRSA*** Sections 154 through 159. Condemnation is the preferred method of acquisition for transportation projects because of the quality of title it provides to MDOT. Condemnations take place only after the Right of Way Operations Team Member completes initial negotiations with property owners.

Normally, a project condemnation is done by means of a single Notice of Layout and Taking that includes all property rights for the project, regardless of whether the compensation amount is settled or unsettled with the property owner. The steps taken by the Program Support Services Condemnation Unit for a condemnation include the following:

1. The Condemnation Unit prepares the Notice of Layout and Taking using the final right of way plans for the project and the Notification list provided by the Office of Legal Services. The notice includes a description of the interests acquired from each property owner, the item reference number for the interest, the names of the apparent owners, and the location and station on the preliminary right of way plans for the right acquired.

2. The Condemnation Unit sends a project voucher to the Bureau of Finance and Administration requesting it to prepare and issue checks for payment of the compensation for the acquisitions to the parties indicated in the Notification List.

   The Condemnation Unit assembles the condemnation package for each parcel. The package includes a copy of the preliminary right of way plan section that includes the parcel, the payment check, the Notice of Layout and Taking and a Statement of Determination of Damages that describes the enclosures, the compensation to be paid and any rights of appeal that apply. In some cases, changes in the title that are noted during the update done at the time of condemnation may require re-vouchering of the compensation check.

3. The Condemnation Unit delivers the Notice of Layout and Taking to the Office of Legal Services for title update and recording.

4. Once the Notice of Layout and Taking is recorded, the Condemnation Unit mails the condemnation packages by registered or certified mail or delivers them by personal service. In the case of multiple owners, MDOT may deliver the condemnation package to any one of the owners.

5. The Condemnation Unit publishes a notice of the condemnation in a newspaper of general circulation in the county where the property is located.

6. The R/W Mapping Support Unit sends municipal officials, the local assessor and the county commissioners a copy of the Notice of Layout and Taking and a copy of the preliminary right of way plans.

7. Within 1 year of the recording of the Notice of Layout and Taking, the R/W Mapping Support Unit sends the final right of way plans to the registry of deeds for recording as required by 23 ***MRSA*** Section 154.

2-5.02(c) Disposals

Disposal procedures depend on the nature of the property in question and the party to whom MDOT intends to convey the property. Disposal of real property is addressed comprehensively in Chapter 7.

Disposition of excess or surplus land most commonly is done pursuant to 23 ***MRSA*** Section 61:

1. Vacation. Transfers land or any part of land acquired for a transportation project back to the person in whom title was vested at the time of acquisition, and that owner's heirs and assignees. The Supervisor of Right of Way Research updates the Right of Way map and prepares the legal description for the Deed of Vacation using a quitclaim deed format. The description is incorporated into the deed prepared by the Office of Legal Services for signature by the Commissioner of Transportation. The Program Support Services R/W Mapping Support Unit notes the area vacated, together with the recording references for the Deed of Vacation, on the most current right of way plans for the area.

2. Sale. Transfers land or other property interests that are no longer necessary for transportation purposes to a party other than the original owner or that owner's heirs and assignees. The Supervisor of Right of Way Research updates the Right of Way map and prepares a legal description for the quitclaim deed. The description is incorporated into the deed prepared by the Office of Legal Services for execution by Maine's Governor. The Program Support Services R/W Mapping Support Unit notes the area sold, together with the recording references for the Governor's Deed, on the most current right of way plans for the area. Note that the ability to sell land acquired after October 1, 2001 is governed by 1 ***MRSA*** Section 815, which grants a right of first refusal to a condemnee and the condemnee's heirs in certain circumstances.

3. Lease. Permits the use of MDOT property by others pending the use of the property for transportation purposes. The Office of Legal Services prepares the lease and the Program Support Services R/W Mapping Support Unit provides the property description and a plan segment, if needed.

2-5.02(d) Discontinuances

MDOT may terminate the State or State-aid highway status of a roadway by means of a discontinuance pursuant to its powers under 23 ***MRSA*** Section 651. The Program Support Services R/W Research Unit prepares the discontinuance order, including a description of the area affected. The order is signed by the Commissioner of Transportation and recorded. Recording references and location information are noted on the right of way plans for the highway. The town or county originally responsible for the roadway becomes liable for its maintenance thereafter.

Upon request, the Program Support Services R/W Mapping Support Unit also prepares discontinuance orders for county commissioners and municipal officers when those officials decide to discontinue a county or town way that lies outside the limits of a new State highway constructed by MDOT. These orders, pursuant to 23 ***MRSA*** 2060(1), must reference the recorded MDOT right of way plan for the new State highway. Upon discontinuance, the interests of the county or municipality pass to the abutting property owners in accordance with the provisions of 23 ***MRSA*** Section 2060(2).

2-5.02(e) Establishment, Modification and Release of Access Control

Sections 7-7.01 and 7-7.02 outline MDOT's objectives for access management and control. MDOT controls access to the highway system by 2 principal means. The first is the permit process for entrances. The regulatory system arises out of MDOT's obligation to manage the number, placement and use of entrances, driveways and approaches onto the highways pursuant to 23 ***MRSA*** Section 704. MDOT's role is to protect and promote the safety of the traveling public and to maintain the highway drainage and other aspects of the highways. In the case of arterial highways, the control of entrances also is intended to permit highway users to maintain travel speeds at the posted limits. By statute, MDOT must deny any permit request in a location for which MDOT owns the access control rights.

The second method of establishing control is the acquisition of all or a part of a parcel's access rights by condemnation or voluntary deed. This may occur as a part of a project or as an independent acquisition. Acquisition is used most often with controlled access highways, as provided in 23 ***MRSA*** Sections 301 through 303, and limited access highways. MDOT makes these acquisitions to manage the safety and capacity of its highway systems.

The Program Support Services R/W Research Unit maintains records of all rights of access control on MDOT highways. All project plans include the location and title references for access control rights acquired by MDOT within the project area. Developers seeking project approval under 23 ***MRSA*** Section 704-A, as well as those seeking new or modified entrances under 23 ***MRSA*** Section 704, contact the Program Support Services R/W Research Unit for information on any MDOT-held access control that may affect their applications.

When a non-project access control transaction takes place, a Commission Record item is prepared by Program Support Services for approval by the Commissioner of Transportation. After Commissioner approval, the Right of Way Property Manager sends it to Program Support Services R/W Mapping Support Unit. The Property Manager adds the new information to the access control files and the Right of Way Mapping Support Unit updates the relevant right of way plans. Access control acquired as part of a project is included in the right of way plans prepared for the project. The Project Team Mapper notifies the Program Support Services R/W Mapping Support Unit of the new controls once the locations and scope of the controls are final.

2-6 RIGHT OF WAY PLANS

2-6.01 Overview

Right of way plans depict the lands and rights in land necessary to accommodate MDOT transportation projects. Because right of way plans are used for multiple purposes, including project cost estimates, acquisition and owner compensation, the accuracy and completeness of the plans are critical to project success. Right of way plan preparation, or mapping, takes place in preliminary and final stages.

Project Teams use preliminary right of way plans for public information meetings, relocation planning and other early activities. The plans show items including existing right of way, property features, apparent property boundaries and utility locations. Final right of way plans show all project elements, including the limits of new construction and of new right of way. They are used for valuation, negotiation, acquisition activities including condemnation, utility relocation, relocation of residential owners and tenants, business relocations and environmental reviews and permitting.

As illustrated in Table 2-1, Right of Way Mappers engage in problem solving and team coordination throughout the project development process. The steps involved in the right of way mapping process are described in Sections 2-6.03 through 2-6.05 and shown in the Right of Way Mapping Project Check List

2-6.02 Plan Format and Computerization

All right of way plans must conform to State and Federal standards, specifications, policies and procedures. The symbols used in MDOT right of way plans appear in Figure 2-2.

MDOT prepares all preliminary right of way plans in metric units and all final right of way plans in dual units of measurement (metric and English).

MDOT uses Microstation computer-aided drafting and design (CADD) software, a product of Bentley Systems, Inc., to create its right of way plans. Current conventions for Working Units, Global Origin, Level Structure, File Names, File Content, Line Styles, Line Weights, Fonts, Cells, Color Table and other items are available on the Internet at http://www.state.me.us/mdot/cadd. All consultant-prepared plans must be in the .dgn format used by Microstation. Consultant plans must comply with the specifications described on the MDOT Microstation Information Pages online at http://www.state.me.us/mdot/cadd/micro-station/spec.htm.

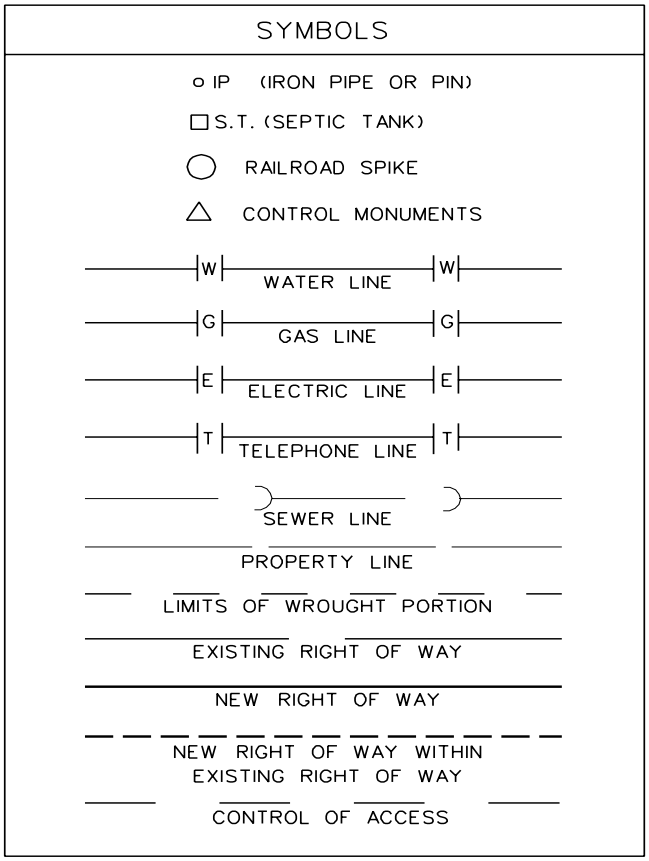

FIGURE 2-2 — Right of Way Plan Symbols

Chapter 9 of the *MDOT Microstation Manual* contains detailed information about creating right of way plans using Microstation. The information is available in electronic form at http://www.state.me.us/mdot/cadd/microstation/manual.htm. The *MDOT Microstation Manual* includes command references, how-to instructions on general functions, directions for creating a base line, process descriptions for sheeting and batch plotting and information on using the settings manager, right of way level standards and general operations. Bridge-level, highway-level and topography-level structures are included in the appendices.

2-6.03 Right of Way Base Map

The Programs Survey Editor sends the Project Team Mapper an electronic file for the preliminary survey plan (mifiled plan), which the Mapper uses to develop the right of way base maps for a project. MDOT uses right of way base maps for public meetings or public hearings, but does not rely on right of way base maps for acquisition descriptions. The right of way base maps include:

1. Project base line;

2. Topography including existing traveled way, cross culverts, buildings, utilities, property markers and other miscellaneous items from survey and POR data;

3. Existing rights of way, with detailed source references, based on a search of MDOT plan files, deed files and layout records for state, county and town roads and railroads; and

4. Property line locations based on tax map information.

2-6.04 Preliminary Mapping Process

The preliminary mapping process builds on the right of way base map, adding verified ownership information, requirements for the new right of way, and other details relating to the project and the affected properties. Mappers use the title reports and PORs for the project to plot property ownerships on the right of way plans. Mappers plot out the parcel descriptions provided by title examinations and check them against the property lines as reported by the field inspections. Mappers must make judgments about conflicts that appear between statements of bearings, missing courses and other obvious errors. Deeds and other documents frequently give distances in rods, which usually are approximations of the actual distance. A similar situation exists with distances shown on old town plotting plans and other plans. Physical evidence of boundaries prevails over deed distances, but Mappers often must eliminate or compensate for those conflicting items and use their best professional judgment. In doing so, Mappers take into consideration the intent of the deed as applied to physical evidence. If there are serious discrepancies that the Mapper cannot resolve logically, then further field investigation, and possibly additional title examination, is required.

Once the Project Team Design Member supplies the Mapper with the CADD files for the preliminary design plans, the Mapper begins to determine the new right of way required for the project. The new right of way size and configuration are directly related to the following considerations:

1. Design Characteristics Of The Transportation Facility. This includes pavement and shoulder width, median type, drainage, clear zone requirements and other special features. Standards for right of way widths are discussed in Section 2-6.06(b).

2. Type Of Property Traversed By The Facility. Examples of different types are improved land with buildings, raw woodland and cropland. Where safety considerations permit, MDOT generally reduces right of way widths in front of improvements, including houses and other major structures, to minimize project impacts and right of way acquisition costs.

3. Utilities. Right of Way requirements relating to the relocation of utilities.

4. Special Project Needs. This includes mitigation projects, ferry terminals, cargo terminals, airports, railroads and other non-highway facilities. In these cases, MDOT acquires sufficient land and other property rights to properly construct and maintain the facility and insure protection of the public investment in it.

5. Maintenance. This includes maintenance needs for future maintenance activities related to maintaining the roadway or structure.

Working with the right of way and design levels of the project CADD files, the Mapper overlays the design features on the right of way plans and develops the tentative new right of way limits for the project. The Mapper also checks to insure the apparent property lines, property owner names and other features shown on the plan layers are consistent with each other and with the information in the PORs for the project. Mappers investigate and reconcile any inconsistencies.

Preliminary plans must contain the following data:

1. Property lines plotted from deed, property owner information and existing plans, as correlated to the property markers located in the field. Focus is on the location of the parcel frontage and sideline boundaries. The back line of lots is shown where practical based on the size of the lot and the plan size. Right of way plans are not property survey plans and do not include a Land Surveyor's stamp. Despite the wider margin of potential error permitted for right of way plans as compared to surveys, the need for accuracy dictates that it is not acceptable practice to reproduce property lines solely and directly from tax maps.

2. Existing easements and other property rights, including limited, conditional and full access controls held by MDOT. These rights are located and identified on the plans.

3. Depiction of each parcel, with the setup information on the name of the property owner, the parcel number assigned by MDOT and the total parcel area. Setups contain the acquisition item number, owner name(s), each right acquired from the parcel and total area of acquisition for each right.

4. Plotted locations of other parcel/property features, including wells, septic systems, water lines and underground utilities.

5. Existing centerline alignment and controls, tied into any existing centerline alignments from previous projects in the area. This information is drawn primarily from the records maintained by the Program Support Services R/W Research Unit.

6. References to information sources used to prepare the plan, including surveys, MDOT plans (by file number) and town or county layouts.

7. If prepared by a consultant, the name of the preparing firm on each plan sheet together with the endorsement: *"Apparent property lines and existing right of way determined and plotted by: (fill in name)."*

The Mapper distributes hard copies of the preliminary right of way and design plans to the Project Team Right of Way Operations, Utilities and Environmental Members; the Project Manager; and the Office of Legal Services. The Mapper also requests from the Office of Legal Services any additional title work needed for permanent acquisitions.

Along with the preliminary right of way plan, the Mapper may prepare a plan using aerial photography. This may be a cronaflex plan from enlarged aerial photographs of the project area, or it may be a background Microstation level. Cronaflex plans superimpose the new base line, property lines, property owner names, existing right of way and tentative new right of way limits onto aerial photographs of the project area. A hard copy of the cronaflex plan is provided to the Project Team Right of Way Operations Member. If the plan was prepared in Microstation, the Mapper either downloads digital photographs into Microstation or scans in aerial photographs. The Mapper then creates a mosaic from the photographic data. The resulting photographic level becomes a part of the project plan files and is manipulated as needed.

The preliminary right of way plan files are used to generate the public hearing plan for the project. In some cases, the hearing plan displays alternative project locations and right of way impacts. The apparent property line locations often are copied from tax maps for public hearing plans only. These locations later are verified through the mapping process.

Where consultants prepare preliminary right of way plans for a project, the consultant coordinates with the Right of Way Mappers in the programs during production. The consultant delivers the completed plans and related materials to the Right of Way Mappers in the programs for final review and acceptance by the Program Support Services R/W Mapping Support Unit.

2-6.05 Final Mapping Process

The Mapper begins the final mapping process when design plans meet the Design Plans Impacts Complete standards. Design plans can be used for final right of way plans when they contain the information shown in Table 2-3. In addition to the information from the design plans, the Mapper considers information generated at the public hearing on the project (Step 8 of the Team Process of Project Development). The Mapper reviews the hearing transcript to identify any issues or commitments that may affect right of way requirements.

TABLE 2-3 — Design Plans Impacts Complete

Design plans are at the impacts complete level when the plans include the following items:

- Cross-sections that show the proposed limits of slopes and new construction.
- Locations and limits of driveways and entrances to be constructed.
- Percent of slope of drive and entrances, both existing and future.
- Type of surface treatment on drives and entrances.
- Locations of curbing, sidewalks and islands, including their geometrics.
- Locations and design of approach roads to be constructed.
- Locations, lengths and skew of drainage structures to be installed, including culverts, down spouts, berm ditches, storm sewer systems, channel diversions and all outlet ditches.
- Interpolated water flow beyond excavated ditches along old ground to proposed right of way.
- All clearing limits and individual trees and shrubs to be removed, regardless of size or pay (compensation) status.
- Location of any structures to be installed outside of the proposed new right of way (retaining walls, etc.).
- List of all buildings, structures and other improvements to be removed as part of the project.
- Bearings on base line.
- Geometrics, including line change date (ties to survey line and side roads).
- Beginning and end of project stations.
- Locations of all signal poles, special street lighting, etc.
- Poles, conduits, junction boxes, desired power sources for signal poles, special street lighting, etc.
- Existing utilities on plans and cross sections with proposed new locations.
- Proposed guard rail.
- Overhead signs.
- Evidence of designer review prior to submission Project Team Mapper.

Final right of way plans add the following information to the work done in the preliminary plan stage:

1. Construction limits and items;
2. New right of way limits, including slope, clearing and wrought portion limits;
3. Permanent and temporary easement limits;
4. Updated parcel setups;
5. Acquisition stations and offsets;
6. Condemnation distances, including base line and boundary lines;
7. Easement limits and property lines tied into the base line;
8. Calculated areas of acquisition or take for each type of acquisition (fee, easement, etc.);
9. Inside distance calculations;
10. Notes for special items like reserved areas and truck lanes;
11. Total areas of property ownership calculated from cronaflex plans;
12. Plan title block, including the MDOT file number; and
13. Right of way plan disclaimer.

The Mapper does a final check on all calculations and other plan data. Then the Mapper reviews the final plans with the Program Support Services R/W Mapping Support Unit to insure quality and conformity with MDOT standards, as discussed in Section 2-6.06(f). Once the review is complete, the Mapper distributes hard copies of the final right of way and design plans to the Project Team Right of Way Operations, Utilities, and Environmental Members; the Project Manager; and the Office of Legal Services. The Mapper also sends to the Project Team Right of Way Operations Member additional project materials, including title cover sheets, PORs and an updated N&A List.

Prior to condemnation, the Mapper updates the plans to reflect any ownership changes found through the title verification process. The Mapper follows a similar process once the condemnation is completed, and also adds the condemnation recording references to the plan. After construction, the Mapper revises the final plan to show survey and right of way controls and monumentation, sufficient to reestablish the centerline in the future. Changes also are made to show right of way modifications that occurred during construction.

Once changes are finished, the Mapper certifies the final plans as complete and sends electronic and hard copies to the Program Support Services R/W Mapping Support Unit for recording in the appropriate registry of deeds, as required by 23 ***MRSA*** Section 154, and for filing in the Right of Way Plan File. A hard copy of the final plans also is sent to the Maintenance and Operations Division in which the project is located.

2-6.06 Basic Mapping Practices

2-6.06(a) Establishing Existing Right of Way Limits: Layouts and Wrought Portion

The first step in establishing the existing right of way in a project area is to check the layout records in the Program Support Services R/W Research Unit. Those records include previous MDOT projects, layouts ordered by county commissioners and layouts issued by town officials. Layout orders contain location descriptions for the roadway and typically include the width of the layout (usually 3-rod or 4-rod).

Where the best available records are town or county layouts, the field conditions often will indicate that the occupied right of way varies from the layout description. Where there is a significant deviation, and in cases where no layout record or only an incomplete layout record can be found, the public rights in the existing right of way rest on a prescriptive easement. These areas are known as the wrought portion of the right of way. MDOT must establish the wrought portion limits on a project in order to determine the limits beyond which property owners are entitled to compensation.

MDOT may use either of 2 procedures to handle wrought portion right of way on a project. The preferred procedure is designed to set a pay line that is inside the actual limit of the wrought portion. By creating a pay line inside the actual wrought portion limit, the rights of property owners to compensation are fully protected. This process is suggested when additional acquisitions will be necessary beyond the wrought portion limits for the majority of the project length. Establishing this corridor width involves the following steps:

1. Research the right of way to determine that there is no record layout or that the record layout has no stated width.

2. Field check the area in question to determine the approximate limits of the wrought portion area. Locate landmarks and historic features including fences, fence posts, tree rows, stone walls, corner stones and other monuments. Other important indicators are sidewalks, shoulders, ditch lines, the tops of cuts and the toe of fills.

3. Determine the average existing pavement width by measuring in multiple locations. Where minor width variations exist, measurements every 2,500 ft (750 m) are sufficient. Where there are major variations or obvious changes (including wider shoulders, shifts from shoulder to no shoulder, etc.), measure the width of each identifiable segment separately. Where segments are less than 1,000 ft (300 m) in length, at least 2 measurements must be taken that are representative of the segment.

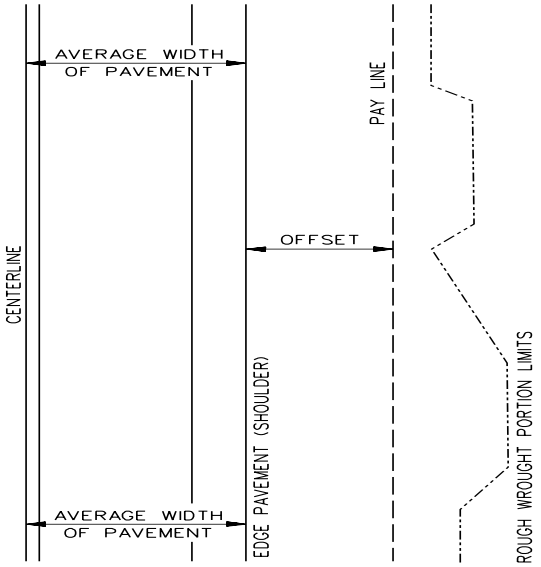

FIGURE 2-3 — Establishing a Pay Line Offset for Wrought Portion Highways

4. Establish a pay line at a distance equal to the average of the pavement width plus the pay line offset, as illustrated in Figure 2-3. The pay line offset is a minimum of 5 ft (1.5 m) outside the average width of pavement on each side, concentric or parallel to the centerline. The pay line is centered on the center of pavement and should be of uniform width through the length of the segment or project. This creates an average offset to apply throughout the project, unless very distinct differences between portions of the project merit a case-by-case review of the proposed offset. The pay line offset area is presumed to be a maintained part of the roadway and within the wrought portion limits as defined by Section 653.

The second procedure available to MDOT is to reestablish the boundary of the roadway through the statutory steps outlined in 23 ***MRSA*** Section 653. MDOT typically uses statutory reestablishment when the boundary lines, limits or location of a State or State-aid highway are lost, uncertain or doubtful but the wrought portion limit lines, as established, are expected to be

sufficient for the majority of the construction and maintenance of the roadway and appurtenances. The statutory process includes:

1. A justification memo to the project file that outlines the results of the layout research and field review.

2. A plan showing the existing topographic features and limits of the proposed reestablishment. The plan includes detail and scale consistent with standard right of way plans. The Program Support Services R/W Research Unit issues a file number for the plan. The Mapper distributes copies of the plan, together with a transmittal letter to town offices for all affected towns, the registry of deeds (for recording), the applicable county commissioners' office(s) and the MDOT Maintenance and Operations Division Office.

3. Signs and notices for the public. A sign at least 18" X 24" (457 mm X 610 mm) in size is prepared in triplicate. Two of the signs are placed along the highway within the limits of the reestablishment and the third is delivered to the town for posting at the town office. The posting period is a minimum of 60 days. The project file must include a memo documenting the date and locations of posting. The Mapper or other Project Team Members periodically check to insure the signs remain posted for the required time.

4. An advertisement in the local or county newspaper with circulation in the project area. The content of the ad resembles the posted signs. The ad must run at least 1 day, including the day that the reestablishment plan is recorded. The Mapper places a copy of the ad in the project files.

5. At the end of the 60-day period, the Mapper contacts the Office of Legal Services to determine whether anyone filed an action contesting the reestablishment.

2-6.06(b) Minimum Standard Widths for New Highway Right of Way Limits

Sections 2-6.04 and 2-6.05 describe the considerations that apply to setting the new right of way limits for a transportation project. In the case of highways, Right of Way Mapping also uses minimum standard widths based on roadway classifications in order to create as consistent a width as practical for the entire length of a project. The standards, shown in Table 2-4, apply to all projects involving roadside improvements beyond the shoulders and to projects with ditching, culvert replacement or drainage system alterations that fall beyond existing right of way limits. Program Right of Way Support Managers may waive the application of the standard widths to a project if they find any of the following:

1. The existing right of way on the project is 4 rods and of sufficient width to incorporate design clear zones and utility infrastructure as relocated.

2. No more than minor acquisitions or easements are required for the project work.

TABLE 2-4 — Minimum Widths for Right of Way Acquisition

Road Classification & Projected AADT	Paved Width	Traveled Way Width	Side Slope	Design Speed	Proposed Minimum R/W Width (one side)	Total R/W Width Minimum
Minor Collectors						
Under 1000 1000 to 4000 Over 4000	12′/13′ (3.0 m/3.9 m) 14′ (4.2 m) 15′/18′ (4.5 m/5.4 m)	10′ (3.0 m) 10′/11′ (3.0 m/3.3 m) 11′/12′ (3.3 m/3.6 m)	1:3 1:3 1:3	40 mph (60 km/h) 40 mph (60 km/h) 45 mph (70 km/h)	33′ (10 m) 33′ (10 m) 40′ (12 m)	66′ (20 m) 66′ (20m) 80′ (24 m)
Major Collectors						
Under 1000 1000 to 4000 4000 to 6000 Over 6000	12′/13′ (3.0 m/3.9 m) 14′ (4.2 m) 15′ (4.5 m 18′ (5.4 m)	10′ (3.0 m) 10′/11′ (3.0 m/3.3 m) 11′ (3.3 m) 12′ (3.6 m)	1:3 1:3 1:3 1:3	45 mph (70 km/h) 45 mph (70 km/h) 45 mph (70 km/h) 45 mph (70 km/h)	33′ (10 m) 33′ (10 m) 33′ (10 m) 40′ (12 m)	66′ (20 m) 66′ (20 m) 66′ (20 m) 80′ (24 m)
Minor Arterials						
Under 1000 1000 to 6000 6000 to 8000 Over 8000	14′ (4.2 m) 14′/15′/18′ (4.2 m/4.5 m/5.4 m) 18′ (5.4 m) 20′ (6.0 m)	10′/11′ (3.0 m/3.3 m) 10′/11′ (3.0 m/3.3 m) 11′/12′ (3.3 m/3.6 m) 12′ (3.6 m)	1:3 1:3 1:4 1:4	45 mph (70 km/h) 45 mph (70 km/h) 55 mph (90 km/h) 55 mph (90 km/h)	33′ (10 m) 33′ (10 m) 40′ (12 m) 50′ (15 m)	66′ (20 m) 66′ (20 m) 80′ (24 m) 100′ (30 m)
NHS (Non-interstate)						
35 to 50 mph (50 km/h – 80 km/h) ≥ 50 mph 4 lane	34′ (10.2 m)	12′ + 12′ (3.6 m + 3.6 m)	1:4	35 mph – 50 mph (50 km/h – 80 km/h) 50+ mph (80+ km/h) 55+ mph (90+ km/h)	40′ (12 m) 50′ (15 m) 60′ (18 m)	80′ (24 m) 100′ (30 m) 120′ (36 m)
Urban						
With Curb					10′ to 15′ (3 m to 4.5 m) Behind Curb	
No Curb No Curb				≤35 mph (≤50 km/h) >35 (>50 km/h)	24.75′ (7.5 m) 33′ (10 m)	49.5′ (15 m) 66′ (20 m)

Notes:

1. *Minimum utility offset to face of pole.*
2. *Minimum utility offset with pole and mast arm, does not provide aerial clear zone rights beyond R/W limits.*
3. *Minimum utility offset based on 3-ft (0.9-m) deep ditch with pole 2 ft (0.6 m) behind ditchline, includes pole and mast arm.*
4. *Truck lanes or additional lane/pavement width will increase minimum offsets by the added width.*

2-6.06(c) Centerline Tie-ins

Centerline information is an important tool for the creation of the descriptions used in property acquisition documents. MDOT coordinates and controls the highway centerline using survey points. The Survey Unit places at least 2 survey control points on every project. The control points typically are iron rebar driven into the ground or disks mounted in ledge. The goal is to have all projects coordinated in the Maine State Coordinate System.

Whenever practical, new project plans should include tie-ins to the centerlines from previous projects. If the “old” centerline is not tied into by the new project plans, then it is difficult to determine the limits of the existing right of way with the desired degree of certainty. In these cases, new acquisitions are forced to rely on a separate centerline. This fosters confusion when right of way limits and private property boundary interpretations are made in the future.

To help insure that existing baselines are tied into whenever feasible, the Project Team follows these steps:

1. At the initial team meeting, the Mapper provides the plans of any previous projects in the new project area.

2. If the existing plans show centerline coordinates in the State Plane Coordinate System, the Project Team Survey Member will compute the centerline coordinates for the project.

3. If the existing plans have an alignment in the State Plane Coordinate System but no control is located in the new project area, the Project Team evaluates the costs, benefits and feasibility of reestablishing the centerline.

4. If the existing plans show a centerline with assumed coordinates, the Project Team Survey Member will tie in any existing monumentation of the project. The Project Team Design Member will do a “best fit” to determine the location of the existing centerline.

If there are no centerline alignments from any previous project, the Survey Team Member will locate any existing monumentation. The Project Team Design Member will establish an entirely new baseline for the project.

2-6.06(d) Alignment Data

Alignment data is required on right of way plans to permit the proper location of determined boundaries and the layout of the designed roadway. The Project Team Design Member provides the coordinated geometric alignment data to the Project Team R/W Mapper. The Mapper places the stations and coordinates of the construction centerline and the following side road alignment points on the right of way plans:

1. POT - Point of Tangency. The point at which a curve ends.

2. PC - Point of Curvature. The point at which a curve begins.

3. PRC – Point of Reverse Curvature. Point at which curves in the opposite general direction meet.

4. PCC - Point of Compound Curvature. The point at which curves of varying radii and in the same general direction meet.

5. PT – Point of Tangency. The point at which a curve ends.

The Project Team Survey Member provides the Mapper with the control traverse (CT) points for the plans.

Both Survey and Design Project Team Members file the data electronically. The survey data file is found in MX, under Design, Create Data Output (e.g., HALGN-MC10.INP). Design data resides on the Design PC in the subdirectory "reports" under the address "pcpinDotaug3" followed by project identification information.

2-6.06(e) Landmarks, Private Survey Markers and Right of Way Monumentation

Under the provisions of 14 ***MRSA*** Section 7554-A, MDOT has certain obligations to owners of private property to record the location of and restore boundary landmarks and survey markers. If they are not restored, MDOT compensates the landowner for the reasonable cost of restoration by a surveyor. The Project Team Mapper works with the Project Team Survey Member to insure landmarks are located and shown on the right of way plans. The Project Team Mapper creates an inventory of the survey markers and right of way monumentation in a project area (Form MR-3).

The decision to place right of way monumentation is made on a case-by-case basis. The Department's power to set durable right of way monumentation at the angles of highways arises from 23 ***MRSA*** Section 653. Surveyors, Mappers and others use the monumentation to reestablish right of way limits when subsequent projects or other activities occur in the area. When used, right of way control is established and monumentation is placed at the conclusion of construction. This is the responsibility of the Project Manager, in cooperation with the Project Team Mapper. If monumentation is placed on a project, the Mapper places information on the monumentation and tie-ins on the final right of way plans.

2-6.06(f) Right of Way Plan Quality Review Process

Chapter 10 and Section 2-1.05 cover general quality assurance/quality control policies and practices for Right of Way personnel. The Program Support Services R/W Mapping Support Unit and the Project Team Mapper each play a role in quality assurance/quality control for right of way plans.

The Program Support Services R/W Mapping Support Unit provides support services and quality reviews for all right of way mapping activities. Its staff helps Project Team Mappers resolve mapping issues and insures that plans meet MDOT Right of Way standards. The Program Support Services R/W Mapping Support Unit sets mapping standards and procedures and also establishes and maintains the protocols for the use of CADD systems to prepare right of way plans. The Unit also performs formal reviews of right of way plans at the end of the preliminary plan stage and at the end of the final plan stage.

The Project Team Mapper is responsible for coordinating with Project Team Members throughout the project and for insuring that right of way plans reflect design changes whenever these changes occur. The Mapper provides updated plans to those who need right of way plans to perform their tasks, including the Right of Way Operations Team Member, Utilities and Railroads Team Member, and the Office of Legal Services. This coordination and update process enables the Project Team to rely on the right of way plans for current, accurate information about the project.

2-7 OTHER MAPPING AND RESEARCH FUNCTIONS

2-7.01 Encroachments

The provisions of 23 ***MRSA*** Section 1401 regulate encroachments on and near the public right of way. Section 1401 defines the prohibited actions, but also permits the MDOT Commissioner to waive the provisions of the Statute in the case of the reconstruction of a building if there will be no adverse effect on highway safety or the public welfare.

Many encroachment issues are referred to local municipalities pursuant to their maintenance obligations under 23 ***MRSA*** Section 754 or their sign removal obligations under 23 ***MRSA*** 1914(9). The Right of Way Control Office of the Bureau of Maintenance and Operations handles all MDOT enforcement cases, including the enforcement of Section 1401 for State and State-aid highways.

In cases where an encroachment may qualify for a waiver of the Section 1401 provisions, satisfy the occupation standards of 23 ***MRSA*** Section 2952, or qualify for other exemption from removal, the matter goes to the Program Support Services R/W Mapping Support Unit for review. Working with the Program Support Services R/W Research Unit, Mapping determines the location and history of the encroachment and evaluates the present and potential future impacts of the encroachment. If the Program Support Services R/W Mapping Support Unit determines that MDOT will not require removal of the encroachment, it works with the property owner to develop terms and conditions that will govern the encroachment. The Program Support Services R/W Mapping Support Unit then issues a Letter of No Objection) containing the terms and conditions. These letters include a reservation of the right by MDOT to require the future removal of the encroachment upon notice to the property owner.

2-7.02 Review of Developer Projects

Private and public developers often propose projects that require changes in existing traffic patterns on adjacent or nearby highways under MDOT jurisdiction. These projects include, but are not limited to, projects that require a traffic movement permit under 23 ***MRSA*** Section 704-A or the ***Site Location of Development Act***, Title 38, Chapter 3, Subchapter I, Article 6.

The Developer Project Coordinator in Traffic Engineering handles all developer project reviews and contacts. The developer submits design plans and a traffic study to MDOT, showing the projected traffic flow and/or turning movements. Developer plans must include the existing right of way lines for each affected roadway, the roadway baselines as established in previous MDOT projects and the MDOT map file number of relevant MDOT right of way plans. MDOT reviews the plans to determine whether the project meets applicable requirements and can be accommodated by the highway system. The Program Support Services R/W Mapping Support Unit determines whether additional right of way is required for the project. If a project is approved, MDOT may impose operations or design requirements on the project as a condition to the approval.

The role of the Program Support Services R/W Mapping Support Unit in developer project reviews includes the following:

1. Provide the developer with copies of any existing right of way plans for the project area.

2. Determine the accuracy of the plotted existing right of way.

3. Identify all additional right of way required for construction, maintenance and operation of the proposed new highway design.

4. Notify the Developer Project Coordinator in Traffic Engineering of the results of the mapping review.

5. Provide the developer with sample acquisition documents for the rights required for the project.

6. Review any revised or supplemental developer plans for compliance with required changes.

7. Review proposed acquisition documents prepared by the developer prior to execution.

8. Assign a developer plan file number to the final plan recorded by the developer.

9. File reproducible copies of all project plans and acquisition documents, as provided by the developer.

In some cases, the Program Support Services R/W Mapping Support Unit and the Developer Project Coordinator may determine that the developer does not need to prepare a full right of way plan. In these instances, which typically involve only easements, the Program Support Services R/W Mapping Support Unit adds the location and recording information for the developer project easements to the most recent existing MDOT right of way plan for the project area.

Developers are responsible for acquiring any needed right of way. Permanent rights necessary to accommodate the new facility must be transferred to MDOT. The developer is not required to transfer to MDOT any of the temporary rights needed for construction, including grading rights. The developer also is responsible for delivering reproducible copies of plans and acquisition documents to MDOT once the approval and acquisition processes are complete.

2-7.03 Non-Project Agreements with Property Owners

MDOT often enters into agreements with individual property owners that permit the owners to perform activities on their property that may affect the Department's facilities or right of way.

Examples include drainage alterations, topographic modifications and landscaping. These agreements are used whenever MDOT agrees to permit any permanent improvement or activity to occur that affects land or facilities within the limits of the right of way.

Because these agreements often affect multiple aspects of MDOT's activities, the negotiation process typically involves representatives from several MDOT units, including the Bureau of Maintenance and Operations, the Program Support Services R/W Mapping Support Unit and the Office of Legal Services. Once the parties agree on the terms and conditions for the agreement, the Program Support Services R/W Mapping Support Unit prepares the agreement, handles its execution, records it, provides a copy to the Bureau of Maintenance and Operations and enters notations referencing the agreement on the current right of way plan for the affected area. A Property Owner Agreement specifies:

1. Description of the parties to the agreement;

2. Reasons the agreement is needed;

3. Detailed specification of the construction or other work to be performed by the owner;

4. Description of the rights, normally a license, MDOT gives the owner to enter MDOT property and perform work;

5. Description of any rights the owner conveys to MDOT to permit it to inspect and maintain the owner's improvements as MDOT deems necessary; and

6. Specification of the property owner's obligations for maintenance, compliance with laws and indemnification of the State of Maine.

Typically, the Maintenance and Operations Division Engineer or Assistant Division Engineer acts as the MDOT signatory for these agreements.

2-7.04 Section 815 List

The Program Support Services R/W Mapping Support Unit administers the list of properties that are subject to the right of first refusal provisions of 1 ***MRSA*** Section 815. Section 7-5.02 describes the criteria for property included in the Section 815 List. The Section 815 responsibilities of the Program Services Mapping Support Unit are:

1. Establish a Section 815 control date for each right of way project involving acquisition of property after October 21, 2001. The control date is 8 years after the vesting in MDOT of title to the first property acquired for the project.

2. Advise the Right of Way Property Manager annually, in writing, of the projects with Section 815 control dates for the upcoming year.

3. At the request of the Right of Way Property Manager, prepare a Deed of Vacation for any property disposed of under the provisions of Section 815.

2-7.05 Agreements with Municipalities

When MDOT no longer requires property for its own transportation facilities, it may decide to allow the use of the land to a municipality for continued use for transportation purposes, (e.g., parking, trails, service roads.). These are known as relinquishments. In these cases, the Office of Legal Services prepares an agreement. The Program Support Services R/W Mapping Support Unit adds the agreement to the original acquisition document in its Deed File and notes it on MDOT's right of way plans. See Chapter 7.7.06 for a detailed discussion of relinquishments.

2-7.06 Baseline Descriptions for Highway Designations

Whenever MDOT completes a highway project involving a change in the location of the highway as described in 23 ***MRSA*** Section 62, or when the classification of a highway under 23 ***MRSA*** Section 53 is changed, MDOT must document the changes and the Commissioner of Transportation must approve the new designations. The Program Support Services R/W Mapping Support Unit prepares the Commissioner's Item, including the new description, for submission to the Commissioner's Office. Once the Commissioner approves the change, the new designation is added to the records for the highway in question.